(12) UK Patent Application (19) GB (11) 2 273 867 (13) A

(43) Date of A Publication 06.07.1994

(21) Application No 9226788.9

(22) Date of Filing 23.12.1992

(51) INT CL[5]
A47G 25/48

(52) UK CL (Edition M)
A4L LBET L121

(56) Documents Cited
GB 2239392 A US 3746223 A

(58) Field of Search
UK CL (Edition M) A4L L121
INT CL[5] A47G 25/48

(71) Applicant(s)
Ferguson Hangers Ltd

(Incorporated in the United Kingdom)

Appleby Castle, APPLEBY CASTLE, Cumbria, CA16 6XH, United Kingdom

(72) Inventor(s)
Michael Anthony Hawkins
Graham Williamson

(74) Agent and/or Address for Service
Carpmaels & Ransford
43 Bloomsbury Square, LONDON, WC1A 2RA, United Kingdom

(54) A hanger

(57) A hanger comprises a fixed frame 2, providing a support bar 6, and a locking bar 8, the locking bar 8 being substantially parallel to the support bar 6 and being attached to the fixed frame 2, wherein at least one end of the locking bar 8 is attached to the fixed frame 2 by a resilient web 10, which allows the locking bar 8 to move towards and away from the support bar 6, such that an article supported by the locking bar 8 and passing between the locking bar 8 and the support bar 6 is pinched between the locking bar 8 and the support bar 6. Such a hanger enables an article supported on the hanger to be held more reliably.

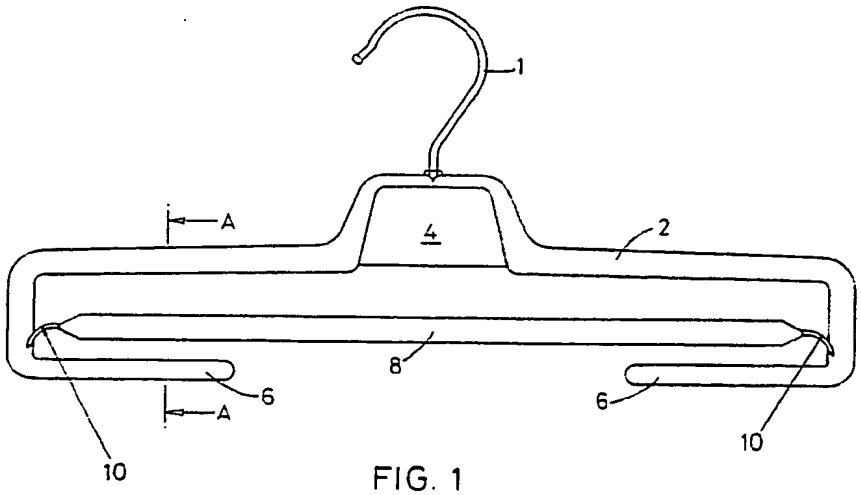

FIG. 1

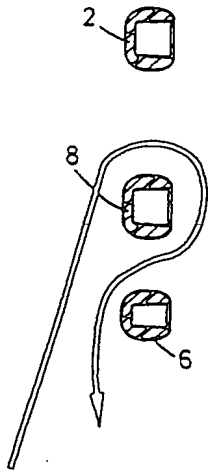

FIG. 2

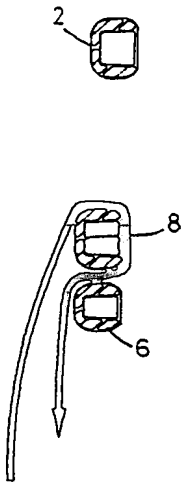

FIG. 3

GB 2273867 A

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

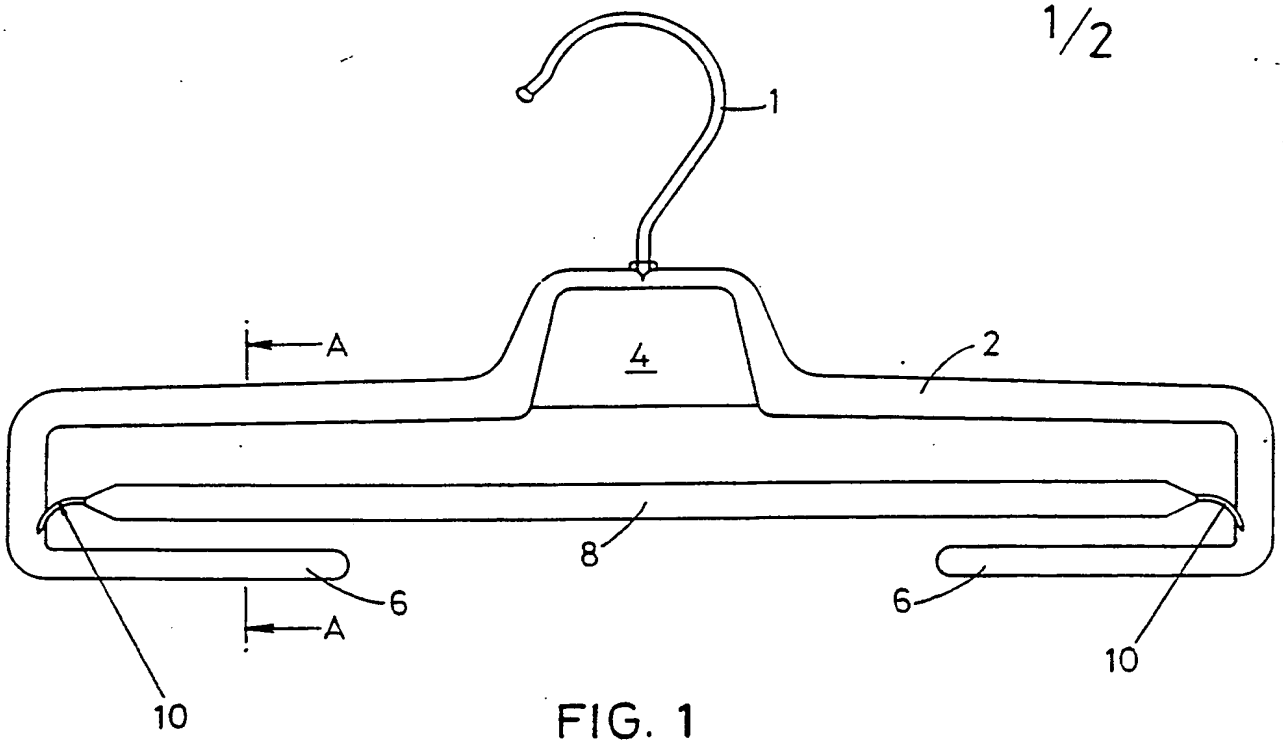

FIG. 1

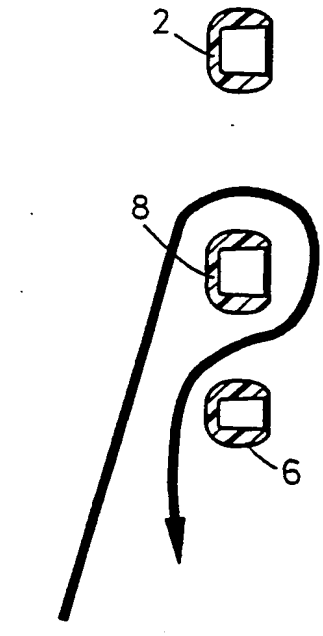

FIG. 2

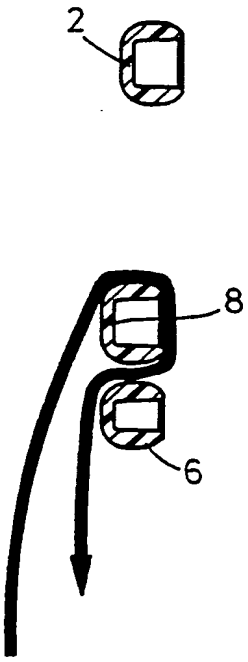

FIG. 3

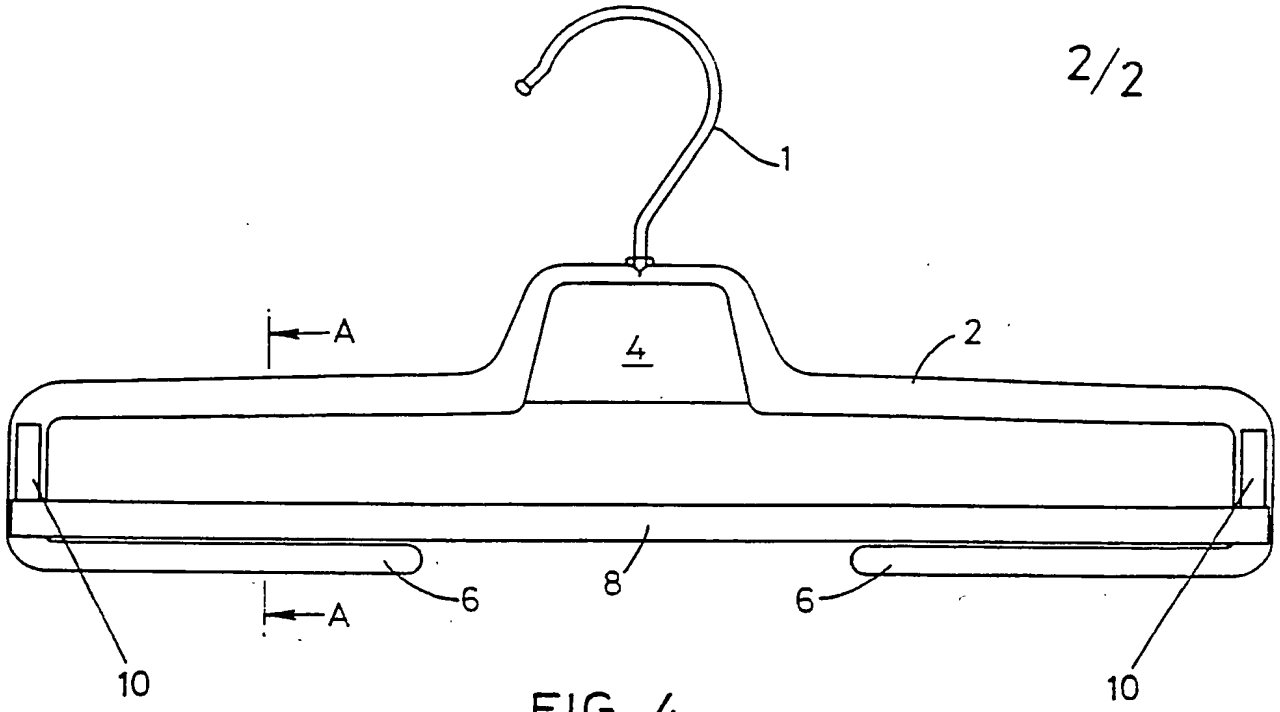

FIG. 4

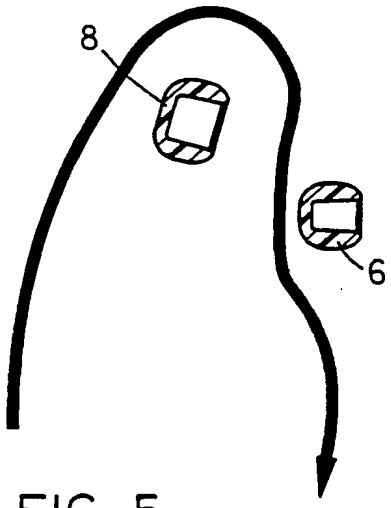

FIG. 5

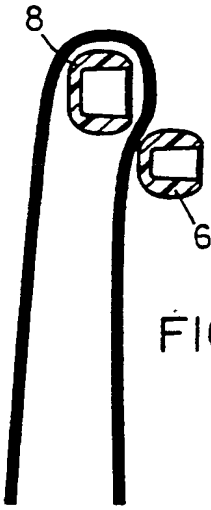

FIG. 6

2273867

A HANGER

This invention relates to hangers, and in particular to trouser and suit hangers.

Trouser and suit hangers, which incorporate a pair of parallel bars for supporting a pair of trousers, are well known. When locating the trousers, the legs of the trousers are passed over the upper bar and back between the two bars so that friction between the bars and the trousers helps to hold the trousers neatly on the garment hanger. Additional friction between the hanger and the trousers can be achieved by forming the bars with a C-shaped cross section or by putting a friction material, such as soft rubber, on one of the bars.

Although the known garment hangers described above are acceptable, the present invention aims to improve upon them.

According to the present invention a hanger comprises a fixed frame, providing a support bar, and a locking bar, the locking bar being substantially parallel to the support bar and being attached to the fixed frame, wherein at least one end of the locking bar is attached to the fixed frame by a flexible web, which allows the locking bar to move towards and away from the support bar, such that an article supported by the locking bar and passing between the locking bar and the support bar is pinched between the locking bar and the support bar.

By including the flexible web, the locking bar is able to move relative to the fixed frame. This movement can be used to enlarge the gap between the locking bar and the support bar to facilitate mounting of a pair of trousers or the like on the hanger. Further, when the pair of trousers has been mounted, the weight of the trousers causes the locking bar to be urged towards the support bar, thereby pinching the trousers between the locking bar and the support bar to hold the trousers in the desired position on the hanger.

The amount of movement of the locking bar relative to the fixed frame is determined by the nature of the flexible

web and can be increased or decreased by extending or contracting the length of the flexible web, or by making the flexible web more elastic or more stiff, etc.

Preferably both ends of the locking bar are attached to the fixed frame by a flexible web.

The or each end of the locking bar may be attached to the fixed frame by a single flexible web. Alternatively, a plurality of flexible webs may be employed.

The support bar is preferably broken to define a gap through which an article, such as a pair of trousers, can pass during mounting of the article on the hanger. As the gap is made larger, the support provided by the support bar decreases; hence, it is preferable that the gap be as small as practical. With this in mind, the ease with which a pair of trousers can be mounted on the hanger can be improved by increasing the amount of movement available to the locking bar.

In one embodiment, the flexible webs extend substantially axially from the locking bar. However, in an alternative embodiment, the flexible webs may extend substantially perpendicularly to the axis of the locking bar. In this embodiment, the locking bar may swing between a position substantially in the plane of the fixed frame to a position away from the plane of the fixed frame.

If the flexible webs extend substantially axially from the locking bar, the locking bar is preferably positioned slightly out of the plane of the fixed frame when in a rest position. Thus, when an article is mounted on the hanger, the locking bar is pulled into line with the plane of the fixed frame of the hanger due to weight of the article.

Preferably the flexible webs are resilient such that they bias the locking bar towards the support bar. As a result of this, an article mounted on the hanger during transport is less likely to become misplaced on the hanger due to bouncing up and down of the vehicle.

A hook may be attached to the fixed frame for enabling the hanger to be suspended from a rail or the like.

The hanger is preferably made of plastics material.

Further, the fixed frame and the locking bar are preferably formed as a one piece moulding. If this is the case, a reduction in the height of the hanger can be achieved by moulding the locking bar in a position substantially adjacent the support bar.

Although the present invention is particularly applicable to trouser and suit hangers, it may also be applied to any other appropriate hanger.

Specific embodiments of the present invention are now described, by way of example only, with reference to the accompanying drawings, in which:-

Figure 1 is a schematic front view of a trouser hanger according to the present invention;

Figure 2 is a cross-section on the line AA of the hanger shown in Figure 1, showing the route a pair of trousers takes during mounting on the hanger;

Figure 3 is a cross-section corresponding to Figure 2, but wherein the trousers are mounted on the hanger with the locking bar in an alternative position;

Figure 4 is a schematic front view of an alternative embodiment of trouser hanger according to the present invention;

Figure 5 is a cross-section corresponding to Figure 2, but relating to the hanger of Figure 4; and

Figure 6 is a cross-section corresponding to Figure 3, but relating to the hanger of Figure 4.

With reference to the drawings, the trouser hangers shown in Figures 1 and 4 each include a hook 1 and a fixed frame 2 comprising a label area 4 and a broken support bar 6. A locking bar 8 is attached to the fixed frame 2 by a resilient web 10 at either end of the locking bar 8. Although a single resilient web 10 is shown joining each end of locking bar 8 to its fixed frame 2, two or more resilient webs 10 could alternatively be used.

With regard to the trouser hanger shown in Figures 1-3, the resilient webs 10 extend substantially axially from the locking bar 8. During mounting of a pair of trousers (not shown) on the hanger, the locking bar 8 is raised to

its position shown in Figures 1 and 2. The trousers are passed over the locking bar 8 and between the locking bar 8 and the support bar 6. The trousers are then released and the weight of the trousers is transferred onto the locking bar 8. This weight, together with the biasing action of the resilient webs, causes the locking bar 8 to fall towards the support bar 6, as shown in Figure 3. The portion of the trousers between the two bars (6,8) is thereby pinched by the bars, and this action assists in keeping the trousers in position on the hanger.

The distance the locking bar 8 is allowed to fall towards the support bar 6 is dictated by the resilient webs 10. The degree of movement available to the locking bar 8 can be increased or decreased by adjusting the length or make-up of the resilient webs 10. Furthermore, the weight of the article placed on the locking bar 8 will affect the distance that the locking bar 8 is pulled leftwards in Figures 2 and 3. Hence, the fixed frame 2 and the locking bar 8 are formed such that the locking bar 8 is slightly out of line with the plane of the fixed frame 2 until an article is placed on the hanger, at which time the locking bar is pulled back into line. In this way, the hanger looks as aesthetically attractive as possible when a garment or the like is mounted thereon.

In the embodiment of trouser hanger shown in Figures 4-6, the resilient webs 10 are substantially perpendicular to the axis of the locking bar 8 and enable the locking bar 8 to move from a position (cf. Figure 6) substantially in the plane of the fixed frame 2 to a position (cf. Figure 5) away from the plane of the fixed frame 2.

During mounting of a pair of trousers (not shown) on the trouser hanger of Figure 4, the locking bar 8 is moved into the position shown in Figure 5 and the trousers are passed over the locking bar 8 and between the locking bar 8 and the support bar 6 (as shown in Figure 5). The trousers are then released and the weight thereof is transferred onto the locking bar 8. This causes the locking bar 8 to fall in an arc, due to the resilient webs 10 joining the fixed frame

2 to the locking bar 8. The locking bar 8, after falling, ends up in the position shown in Figure 6, such that the trousers are pinched between the locking bar 8 and the support bar 6.

When it is desired to remove the trousers from either hanger, the locking bars 8 can be readily moved to open the gap between the locking bars 8 and the support bars 6.

As will be appreciated from the foregoing, it is a very simple matter to load a pair of trousers or other garment on a hanger according to the present invention. Further, by making the locking bar 8 integral with the fixed frame 2, there are no moving parts which can jam. Furthermore, the hanger can be made as a one piece moulding, the nature of the plastics material being chosen to provide the necessary resilient properties.

It will of course be understood that the present invention has been described above purely by way of example, and that modifications of detail can be made within the scope of the invention.

CLAIMS

1. A hanger comprising a fixed frame, providing a support bar, and a locking bar, the locking bar being substantially parallel to the support bar and being attached to the fixed frame, wherein at least one end of the locking bar is attached to the fixed frame by a flexible web, which allows the locking bar to move towards and away from the support bar, such that an article supported by the locking bar and passing between the locking bar and the support bar is pinched between the locking bar and the support bar.

2. A hanger as claimed in claim 1, wherein both ends of the locking bar are attached to the fixed frame by a flexible web.

3. A hanger as claimed in claim 1 or claim 2, wherein the or each end of the locking bar is attached to the fixed frame by a plurality of flexible webs.

4. A hanger as claimed in any preceding claim, wherein the support bar is broken to define a gap through which an article can pass during mounting of the article on the hanger.

5. A hanger as claimed in any preceding claim, wherein the flexible webs extend substantially axially from the ends of the locking bar.

6. A hanger as claimed in claim 5, wherein the locking bar moves from a position out of the plane of the fixed frame to a position substantially in the plane of the fixed frame when an article is mounted on the hanger.

7. A hanger as claimed in any one of claims 1 to 4, wherein the flexible webs extend substantially perpendicularly to the axis of the locking bar.

8. A hanger as claimed in any preceding claim, wherein the or each flexible web is resilient and the locking bar is biased by means of the or each resilient web towards a position adjacent the support bar.

9. A hanger as claimed in any preceding claim, wherein the hanger is made of plastics material.

10. A hanger as claimed in any preceding claim, wherein the fixed frame, the locking bar and the or each flexible web are formed as a one piece moulding.

11. A hanger as claimed in any preceding claim, wherein the hanger is a trouser hanger or a suit hanger.

12. A hanger as claimed in any preceding claim, wherein a hook is attached to the fixed frame for enabling the hanger to be suspended from a rail or the like.

13. A hanger substantially as hereinbefore described with reference to and as shown in Figures 1-3 or Figures 4-6 of the accompanying drawings.

Patents Act 1977 Examiner's report to the Comptroller under Section 17 (The Search report) — 8 —	Application number GB 9226788.9
Relevant Technical Fields (i) UK Cl (Ed.M) A4L (L121) (ii) Int Cl (Ed.5) A47G 25/48	Search Examiner M J PENNELL Date of completion of Search 17 MARCH 1994
Databases (see below) (i) UK Patent Office collections of GB, EP, WO and US patent specifications. (ii)	Documents considered relevant following a search in respect of Claims :- 1-13

Categories of documents

X:	Document indicating lack of novelty or of inventive step.	P:	Document published on or after the declared priority date but before the filing date of the present application.
Y:	Document indicating lack of inventive step if combined with one or more other documents of the same category.	E:	Patent document published on or after, but with priority date earlier than, the filing date of the present application.
A:	Document indicating technological background and/or state of the art.	&:	Member of the same patent family; corresponding document.

Category	Identity of document and relevant passages	Relevant to claim(s)
X	GB 2239392 A (MALZHAN)	1 at least
X	US 3746223 (BATTS)	1 at least

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).